

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Application of Michael Seitz et al. Art Unit 1611
Serial No. 10/728,654
Filed December 5, 2003
Confirmation No. 8454
For MICROCAPSULES WITH AMINE ADJUSTED RELEASE RATES
Examiner Barbara S. Frazier

DECLARATION OF YIWEI DING UNDER 35 C.F.R. §1.132

I, Yiwei Ding, declare and state as follows:

(1) I am a joint inventor on the present patent application, U.S. Application Ser. No. 10/728,654.

(2) I make this Declaration based upon personal knowledge of the facts surrounding the inventorship of the subject matter of the present claims of U.S. Application Ser. No. 10/728,654; the subject matter of U.S. App. Ser. No. 10/115,765, which published as U.S. Pub. No. 2003/0022791 and issued as U.S. 6,992,047 to Jawed Asrar and Yiwei Ding (herein, "Asrar et al."); and the subject matter of International Application No. PCT/US02/10551, which published as WO 2002/082901 ("Asrar '901").

(3) I have reviewed the pending claims of U.S. Application Ser. No. 10/728,654, the Final Office Action dated August 27, 2009, the Advisory Action dated November 6, 2009, and the subject matter relied on by the Office in rejecting the currently pending claims as obvious over U.S. 5,925,595 issued to Seitz et al. in combination with Asrar '901. The subject matter of Asrar '901 relied on by the Office in rejecting the pending claims is based on the work of myself, Michael Seitz,

Ronald Brinker, and Jawed Asrar and is thus not the work of a different inventive entity other than the named inventors of the present application.

(4) The subject matter of Asrar et al. (U.S. 6,992,047) is identical to the subject matter of Asrar '901 (WO 2002/082901).

(5) The disclosure of Asrar et al. and Asrar '901 invented by an inventive entity other than Seitz, Brinker, Asrar, and I is the discovery that, in preparing microencapsulated agricultural actives, mixing a high melting point agriculturally active material with a melting point depressant enables the preparation of solid mixtures of the high melting point agriculturally active material and melting point depressant that are characterized by lower melting temperatures than either material in its pure state.

(6) By preparing mixtures having lower melting temperatures than either material in its pure state, one may encapsulate the high melting point agriculturally active material during an interfacial polymerization reaction without raising the polymerization reaction temperature to the normal melting point and without resorting to the use of aromatic solvents to dissolve the high melting point agriculturally active material in an aromatic solvent.

(7) The methods of preparing the mixtures of high melting point agriculturally active material and melting point depressants and the various materials that may be used to form the mixtures are described in Asrar et al. (U.S. 6,992,047) from Col. 8, line 61 to Col. 24, line 33 and in Asrar '901 (WO

2002/082901) at page 14, line 27 to page 42, line 13. It is apparent that this contribution by Asrar et al. was the inventive contribution to the art in view of The Summary of the Invention, which does not mention the materials used in preparing the polymer shell, and claim 1, which also does not limit the materials used in preparing the polymer shell.

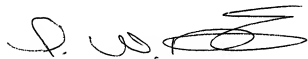
(8) The subject matter directed to the use of isocyanate monomers and one or more polyamines in the preparation of the polymer shell is all as identically disclosed in Asrar et al. (U.S. 6,992,047) and Asrar '901 (WO 2002/082901). That subject matter is based on the work of myself, Michael Seitz, Ronald Brinker, and Jawed Asrar. The relevant portions of Asrar et al. describing the materials useful for the interfacial polymerization of an isocyanate with one or more polyamines spans Col. 24, line 34 to Col. 27, line 65 of Asrar et al. (U.S. 6,992,047). This subject matter is identically disclosed in Asrar '901 (WO 2002/082901) spanning page 42, line 14 to page 48, line 15. These sections of both the U.S. patent and the International Publication describe the work of myself, Michael Seitz, Ronald Brinker, and Jawed Asrar.

(9) Any portion of the Examples in any of the U.S. patent, the U.S. publication, and the PCT Publication, describing the materials useful for the interfacial polymerization of an isocyanate with one or more polyamines also describes the work of myself, Michael Seitz, Ronald Brinker, and Jawed Asrar. Specific description includes:

- The addition of triethylenetetramine (TETA) and Jeffamine T-403 to form the emulsion in Examples 1-8 and 15-17.

- The method of Example 9 wherein the amounts of TETA and Jeffamine T-403 were varied relative to each other to prepare the materials whose properties are described in Table 3.

(10) I further declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under 18 U.S.C. § 1001, and that such willful false statements may jeopardize the validity of the application or any patent issuing thereon.



Yiwei Ding

1/20/2010

Date